

# PROJECT DESCRIPTION

GENERAL  
THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 28 (KEY WEST AVENUE) AT MEDICAL CENTER DRIVE /OMEGA DRIVE IN MONTGOMERY COUNTY. MD 28 IS CONSIDERED TO RUN IN AN EAST/WEST DIRECTION.

MODIFICATION TO INTERSECTION TO INCLUDE REMOVE AND REPLACE NB/SB SIGNAL HEADS WITH L.E.D. SIGNAL HEADS. ADD NB/SB EXCLUSIVE LEFT TURN PHASING. MODIFY SB LANE USE TO 2 LT. 1 THRU AND 1 RT LANE.

## INTERSECTION OPERATION

THE EXISTING CONTROLLER SHALL BE UTILIZED.  
THE INTERSECTION WILL BE MODIFIED TO OPERATE USING 8 NEMA PHASES. THERE WILL BE AN EXCLUSIVE LEFT TURN PHASE FOR THE EAST AND WESTBOUND MOVEMENTS OF MD 28. THE MD 28 THROUGH MOVEMENTS WILL OPERATE CONCURRENTLY WITH AN ACTUATED PEDESTRIAN MOVEMENT ACROSS THE NORTH AND SOUTH LEGS OF THE INTERSECTION. THE MEDICAL CENTER DRIVE/OMEGA DRIVE MOVEMENTS WILL OPERATE WITH A EXCLUSIVE LEFT TURN PHASE FOR THE NORTH AND SOUTHBOUND MOVEMENTS. THE THROUGH MOVEMENTS WILL OPERATE CONCURRENTLY WITH A ACTUATED PEDESTRIAN MOVEMENT ACROSS THE WEST LEG OF THE INTERSECTION.

## SPECIAL NOTES

- THE CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:  
MS. ANYESHA MOOKHERJEE, ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (301) 513-7498  
MR. KEVIN NOWAK, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION  
PHONE: (301) 513-7341  
MR. TOM FOUNTAIN, ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
PHONE: (301) 513-7304  
MR. VICTOR GRAFTON, UTILITY ENGINEER  
PHONE: (301) 513-7350  
MS. CORREN JOHNSON, CHIEF, TRAFFIC OPERATIONS DIVISION  
PHONE: (410) 787-7630  
MR. EDWARD RODENHIZER, MANAGER, SIGNAL OPERATIONS  
PHONE: (410) 787-7652

THE CONTACT PERSONS FOR MONTGOMERY COUNTY DOT AS FOLLOWS:

MR. KAMAL HAMUD, DIVISION OF TRAFFIC ENGINEERING AND OPERATIONS  
PHONE: (240) 777-8761  
MR. CHRIS ROMAINE, MONTGOMERY COUNTY DOT DIVISION OF TRAFFIC ENGINEERING AND OPERATIONS  
PHONE: (240) 777-8762  
MR. ROBERT RICKETTS, MONTGOMERY COUNTY DOT TECHNICAL CENTER  
PHONE: (240) 867-3681

- ALL INTERNAL CABINET WIRING SHALL BE PERFORMED BY THE SHA SIGNAL SHOP. CONTRACTOR SHALL CONTACT ED RODENHIZER 72 HOURS PRIOR TO CONSTRUCTION.

## EQUIPMENT LIST

- EQUIPMENT TO BE SUPPLIED BY THE MARYLAND STATE HIGHWAY ADMINISTRATION.  
NONE.

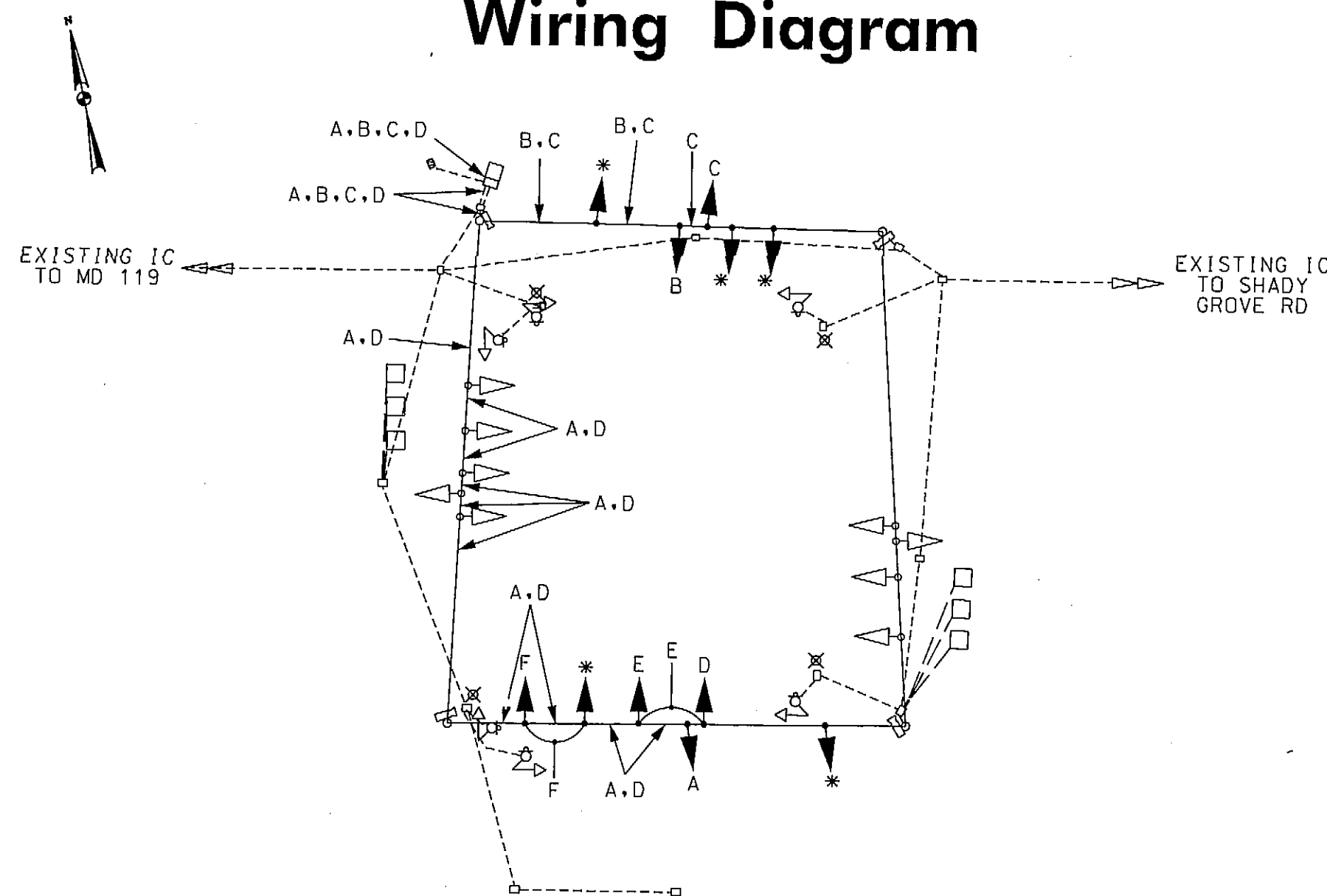
- EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

QUANTITY	UNITS	DESCRIPTION
LUMP SUM	LS	MAINTENANCE OF TRAFFIC
LUMP SUM	LS	MOBILIZATION
6	EA	12 IN. 3-SECTION LED SIGNAL HEAD - SPAN
5	EA	12 IN. 3-SECTION LED SIGNAL HEAD (RA,YA,GA) - SPAN
2	EA	30 IN. X 36 IN. REGULATORY SIGN - SPAN WIRE
1	EA	32 IN. X VAR. STREET NAME SIGN - SPAN WIRE
60	LF	5-CONDUCTOR CABLE (NO. 14 AWG)
565	LF	7-CONDUCTOR CABLE (NO. 14 AWG)
1	EA	RAISE FRAME AND COVER ON EXISTING HANDHOLE
2	EA	NEMA LOAD SWITCHES
LUMP SUM	LS	REMOVE EXISTING SIGNAL EQUIPMENT

## Phase Chart

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
PHASE 1 AND 5	←G-	←G-	R	R	←G-	←G-	←G-	R	R	←R-	←R-	←R-	R	R	←R-	←R-	←R-	R	R	DW	DW	DW	DW	DW	DW	DW
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6																										
PHASE 1 AND 6	←G-	←G-	G	G	←R-	←R-	←R-	R	R	←R-	←R-	←R-	R	R	←R-	←R-	←R-	R	R	DW	DW	DW	DW	DW	DW	DW
1 CHANGE	←Y-	←Y-	G	G	←R-	←R-	←R-	R	R	←R-	←R-	←R-	R	R	←R-	←R-	←R-	R	R	DW	DW	DW	DW	DW	DW	DW
PHASE 2 AND 5	←R-	←R-	R	R	←G-	←G-	←G-	G	G	←R-	←R-	←R-	R	R	←R-	←R-	←R-	R	R	DW	DW	DW	DW	DW	DW	DW
5 CHANGE	←R-	←R-	R	R	←Y-	←Y-	←Y-	G	G	←R-	←R-	←R-	R	R	←R-	←R-	←R-	R	R	DW	DW	DW	DW	DW	DW	DW
PHASE 2 AND 6	←R-	←R-	G	G	←R-	←R-	←R-	G	G	←R-	←R-	←R-	R	R	←R-	←R-	←R-	R	R	WK	WK	WK	WK	DW	DW	DW
PED CLEARANCE	←R-	←R-	G	G	←R-	←R-	←R-	G	G	←R-	←R-	←R-	R	R	←R-	←R-	←R-	R	R	FLOW	FLOW	FLOW	FLOW	DW	DW	DW
2 AND 6 CHANGE	←R-	←R-	Y	Y	←R-	←R-	←R-	Y	Y	←R-	←R-	←R-	R	R	←R-	←R-	←R-	R	R	DW	DW	DW	DW	DW	DW	DW
PHASE 3 AND 7	←R-	←R-	R	R	←R-	←R-	←R-	R	R	←G-	←G-	←G-	R	R	←G-	←G-	←G-	R	R	DW	DW	DW	DW	DW	DW	DW
3 AND 7 CHANGE TO 3 AND 8, 4 AND 7, OR 4 AND 8																										
PHASE 3 AND 8	←R-	←R-	R	R	←R-	←R-	←R-	R	R	←G-	←G-	←G-	G	G	←R-	←R-	←R-	R	R	DW	DW	DW	DW	DW	DW	DW
3 CHANGE	←R-	←R-	R	R	←R-	←R-	←R-	R	R	←Y-	←Y-	←Y-	G	G	←R-	←R-	←R-	R	R	DW	DW	DW	DW	DW	DW	DW
PHASE 4 AND 7	←R-	←R-	R	R	←R-	←R-	←R-	R	R	←R-	←R-	←R-	R	R	←G-	←G-	←G-	G	G	DW	DW	DW	DW	DW	DW	DW
7 CHANGE	←R-	←R-	R	R	←R-	←R-	←R-	R	R	←R-	←R-	←R-	R	R	←Y-	←Y-	←Y-	G	G	DW	DW	DW	DW	DW	DW	DW
PHASE 4 AND 8	←R-	←R-	R	R	←R-	←R-	←R-	R	R	←R-	←R-	←R-	G	G	←R-	←R-	←R-	G	G	DW	DW	DW	DW	DW	DW	DW
4 AND 8 CHANGE	←R-	←R-	R	R	←R-	←R-	←R-	R	R	←R-	←R-	←R-	Y	Y	←R-	←R-	←R-	Y	Y	DW	DW	DW	DW	DW	DW	DW
PHASE 4 ALT AND 8	←R-	←R-	R	R	←R-	←R-	←R-	R	R	←R-	←R-	←R-	G	G	←R-	←R-	←R-	G	G	DW	DW	DW	DW	WK	WK	WK
PED CLEARANCE	←R-	←R-	R	R	←R-	←R-	←R-	R	R	←R-	←R-	←R-	G	G	←R-	←R-	←R-	G	G	DW	DW	DW	DW	FLOW	FLOW	FLOW
4 ALT AND 8 CHANGE	←R-	←R-	R	R	←R-	←R-	←R-	R	R	←R-	←R-	←R-	Y	Y	←R-	←R-	←R-	Y	Y	DW	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/←R-	FL/←R-	FL/Y	FL/Y	FL/←R-	FL/←R-	FL/←R-	FL/Y	FL/Y	FL/←R-	FL/←R-	FL/←R-	FL/R	FL/R	FL/←R-	FL/←R-	FL/←R-	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK

## Wiring Diagram



## GENERAL NOTES

- THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
- PAVEMENT MARKINGS DETAILED ARE PROPOSED AND ARE TO BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH MD-SHA STANDARDS. ALL OTHER PAVEMENT MARKINGS ARE TO BE CONSIDERED AS EXISTING.
- GEOMETRICS SHALL BE CONFIRMED PRIOR TO THE INSTALLATION OF SIGNAL EQUIPMENT. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS. HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS. TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
- ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC AND ARE NOT TO BE CONSIDERED COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL EQUIPMENT WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE PROJECT ENGINEER IMMEDIATELY.

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PROFESSIONAL CERTIFICATION - I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.  
LICENSE NO. 23316 EXPIRATION DATE: 7/13/14

MD-AMD Tracking No.: 11APMO045XX



STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION

MD 28 (KEY WEST AVENUE) AT  
MEDICAL CENTER DRIVE/OMEGA DRIVE  
ROCKVILLE, MD

## GENERAL INFORMATION PLAN

SCALE: N/A DATE: AUGUST 13, 2013 CONTRACT NO.: BW996MB2

DESIGNED BY: F. BROWNLEY COUNTY: MONTGOMERY  
DRAWN BY: F. BROWNLEY LOGMILE: 15002819.16  
CHECKED BY: J. DIRNDORFER TMS NO.: L846  
F.A.P. NO.: N/A TOD NO.: N/A

TS NO. 4057G DRAWING: SG - 01 OF 01 SHEET NO. 2 OF 2

PLOTTED: Tuesday, August 13, 2013 AT 09:14 AM  
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